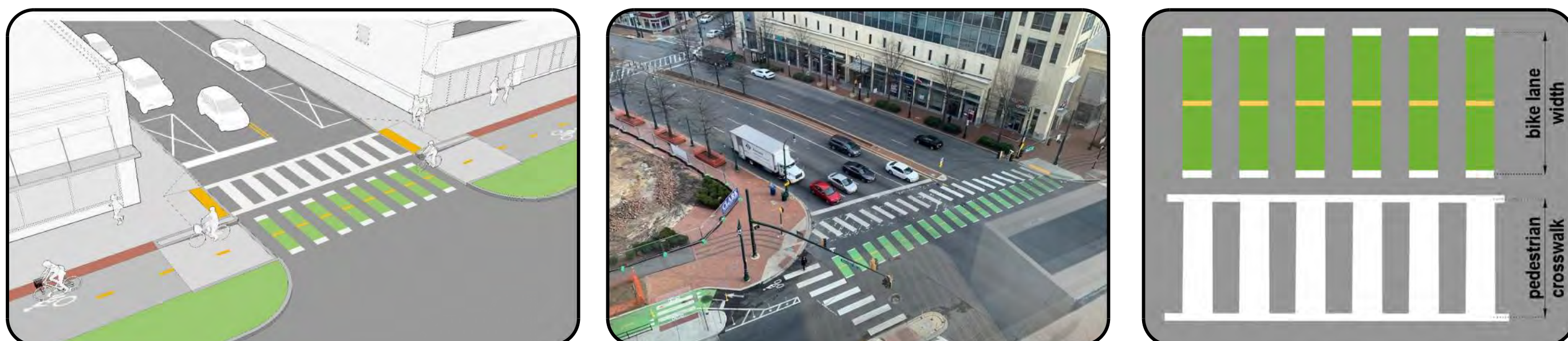


Multimodal Features

Side Street Crossing Treatments



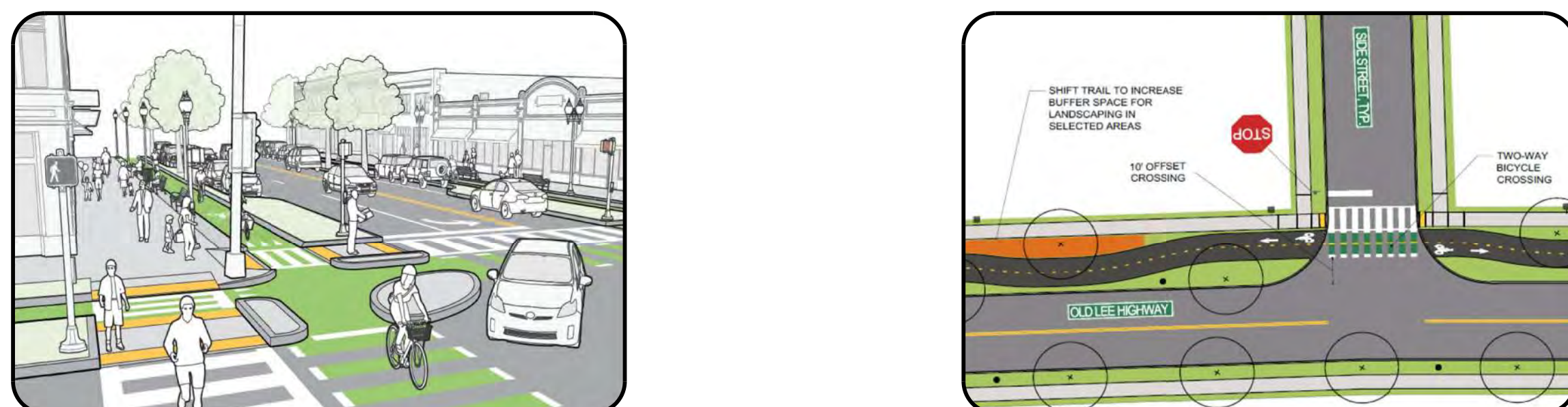
- Located at all side street crossings of joint sidewalk and cycle track facilities.
- Creates separation between cyclists and pedestrians, improving safety.

Informational and Wayfinding Signage



- Located at key points along the corridor to direct pedestrians and cyclists to local destinations, trails and parks.

Side Street Bike Crossing Offset



- Side street crossings are designed to increase distance between the pedestrian/cyclist crossings and thru traffic on Old Lee Hwy.
- Creates space for turning traffic to yield.

Mobility and Safety Features



- Bikeshare stations, bicycle repair stations and blue light emergency phones will be placed strategically throughout corridor.
- Improves safety and promotes bicycle usage.

Rectangular Rapid-Flashing Beacons



- Located at all proposed mid-block road crossings.
- Flashing lights alert drivers when pedestrians are present, improving safety.

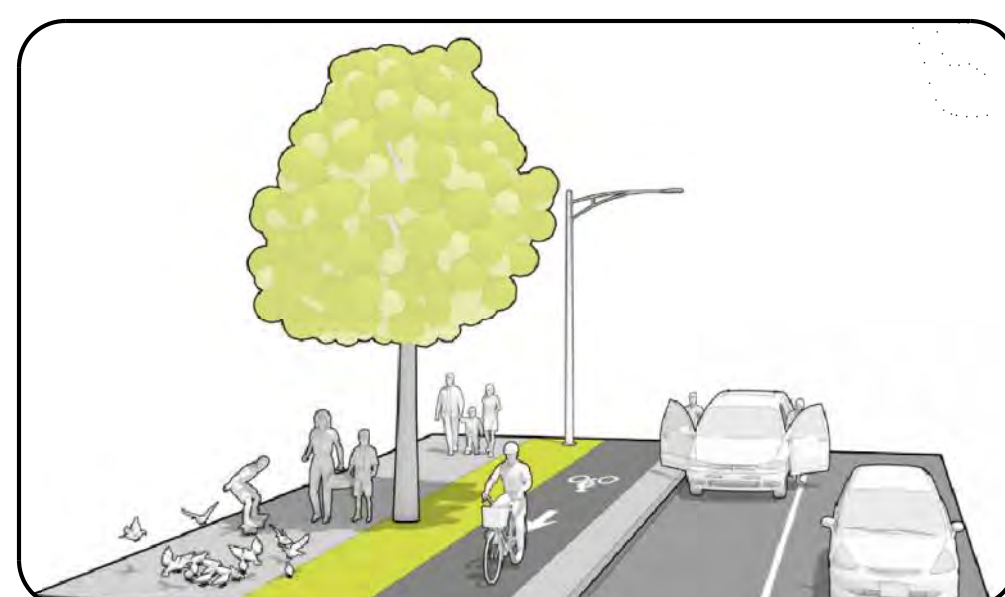
Retaining Wall Treatments



- Retaining wall finishes to match existing walls along Old Lee Highway

Multimodal Features

Protected Bike Lanes



- Protected bicycle lanes improve safety for cyclists along Old Lee Highway.
- Separate lanes allow pedestrians, cyclists, and automobiles to travel at different speeds safely.

Two-Way Cycle Tracks



- Two-way bicycle lanes allow ample space for cyclists to travel in both directions without issue.

Design Guidance

Design Guidance

Two-Way Cycle Track

Recommended Features

1. The desirable two-way cycle track width is 12 feet. Minimum width in constrained locations is 8 feet.
2. When provided a parking lane, 3 feet is the desired width for a parking buffer to allow for passenger loading and to prevent dooring collisions.
3. A dashed yellow centerline should be used to separate two-way bicycle traffic and to help distinguish the cycle track from any adjacent pedestrian lanes.
4. On-street and minor street crossings are a unique challenge to cycle track design. A review of existing facilities and design practice has shown that the following guidance may improve safety at crossings of on-street and minor intersections:
 - If the cycle track is parking protected, parking should be prohibited near the intersection to improve visibility. The desirable no-parking area is 30 feet from each side of the crossing.
 - For minor streets attempting to cross the cycle track from the side street or driveway, street and sidewalk landscaping and other features should accommodate a sight triangle of 20 feet to the cycle track from minor street crossings, and 10 feet from driveway crossings.
 - Close, yellow, and "head to bikes" signage should be used to identify the conflict area and make it clear that the cycle track has priority over entering and exiting traffic.

Required Features

1. Bicycle lane word, symbol, and/or arrow markings (MUTCD Sign 5C-3) shall be placed at the beginning of a cycle track and at periodic intervals along the facility to define the bike lane direction and designate that portion of the street for preferential use by bicyclists.
2. If configured on a one-way street, a "ONE WAY" sign (MUTCD Sign 1-4a-2) with "Bicycle Lane" plaque shall be posted along the facility and at intersecting street, alley, and driveways informing motorists to expect two-way traffic.
3. A "DO NOT ENTER" sign (MUTCD Sign 1-4b-1) shall be posted along the facility to only permit use by bicyclists.
4. Intersection traffic controls along the street, e.g., stop signs and traffic signals, shall also be installed and oriented toward bicyclists traveling in the cross-flow direction.

Optional Features

1. Motor vehicle traffic crossing the cycle track should be constrained or channelized to make turns at sharp angles to reduce travel speed prior to the crossing.
2. If configured as a raised cycle track, the crossing should be raised at which the sidewalk and cycle track maintain their elevation through the crossing. Sharp inclines on either side from road to sidewalk level serve as a speed bump for motor vehicles.
3. Two-stage turn queue boxes should be provided to assist in making turns from the cycle track facility.
4. Motor vehicle traffic crossing the cycle track should be constrained or channelized to make turns at sharp angles to reduce travel speed prior to the crossing.
5. Cycle tracks may be shifted more closely to the travel lanes at minor intersection approaches to get bicyclists closer in the field of view of motorists.
6. A raised median, bus bulb or curb extension may be configured in the cycle track buffer area to accommodate transit stops. Cyclists should yield to pedestrians crossing the roadway at these points to reach the bus stop. A two-way cycle track may be configured on the left side of a one-way street to avoid conflicts at transit stops.
7. May be configured as a raised cycle track.

Intersection Configuration Alternatives

See the Cycle Track Intersection Approach and Bicycle Signal Sections for details or design strategies at intersections.

Bicycle Signal Phase

A dedicated bicycle signal phase can eliminate conflict between turning automobiles and bicyclists.

"Bend in Crossing"

Using a full-width or painted buffer, the cycle track may be bent to provide visibility of bicyclists in advance of the intersecting street.

Design Details:

- Desired minimum: 12 feet (in constrained conditions 8 feet)
- Desired minimum: 3 feet
- Sight triangle at driveway and intersections: 10 to 20 feet
- Desired minimum: 12 feet (in constrained conditions 8 feet)
- Desired minimum: 3 feet
- Parking should be prohibited near the intersection to improve visibility.

Multimodal and Streetscape Features and Examples

Roadside Lighting



- Lighting placed along both sides of Old Lee Highway.
- Enhances aesthetics of corridor, matches style of lighting elsewhere in the City.

Benches and Planters



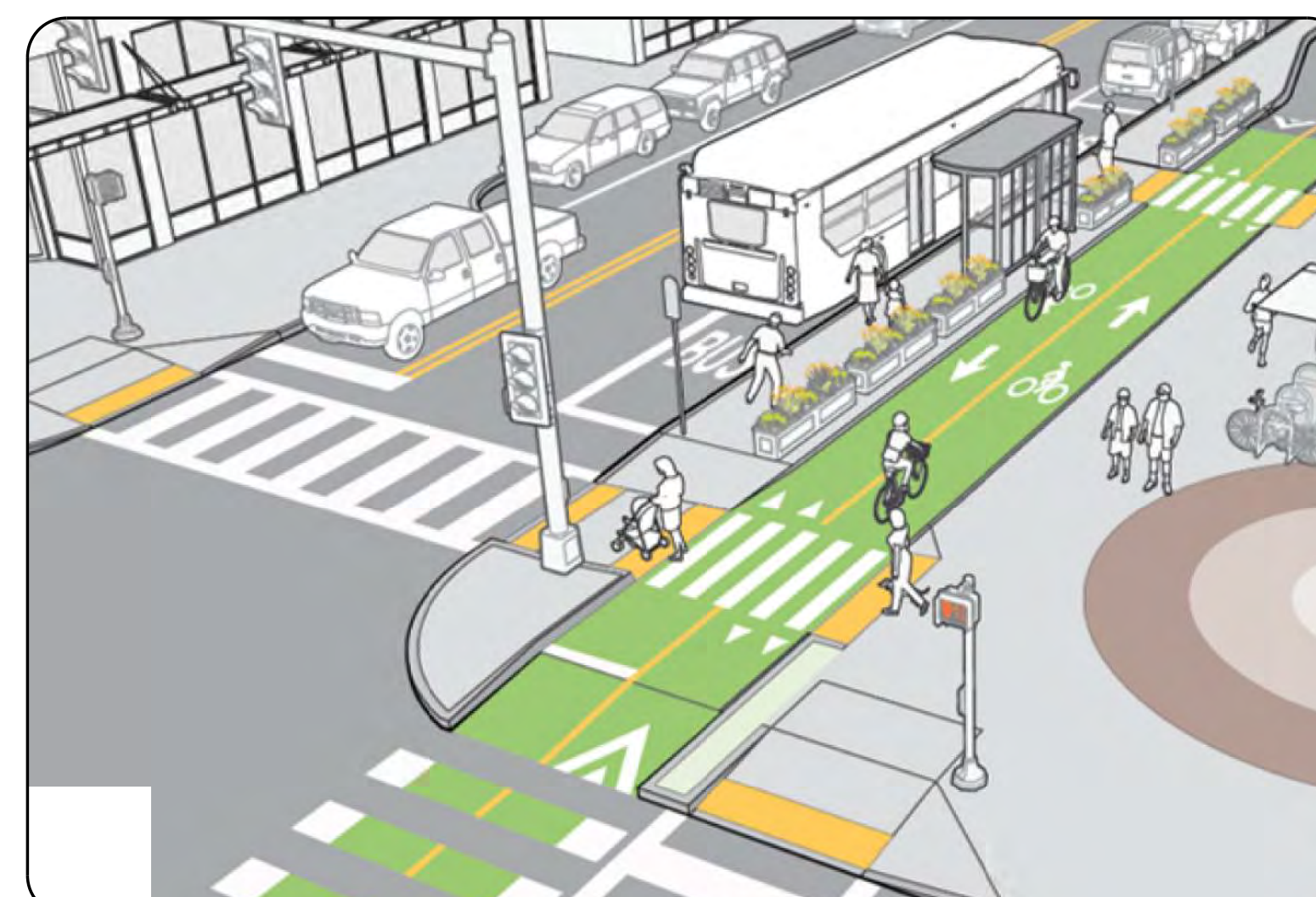
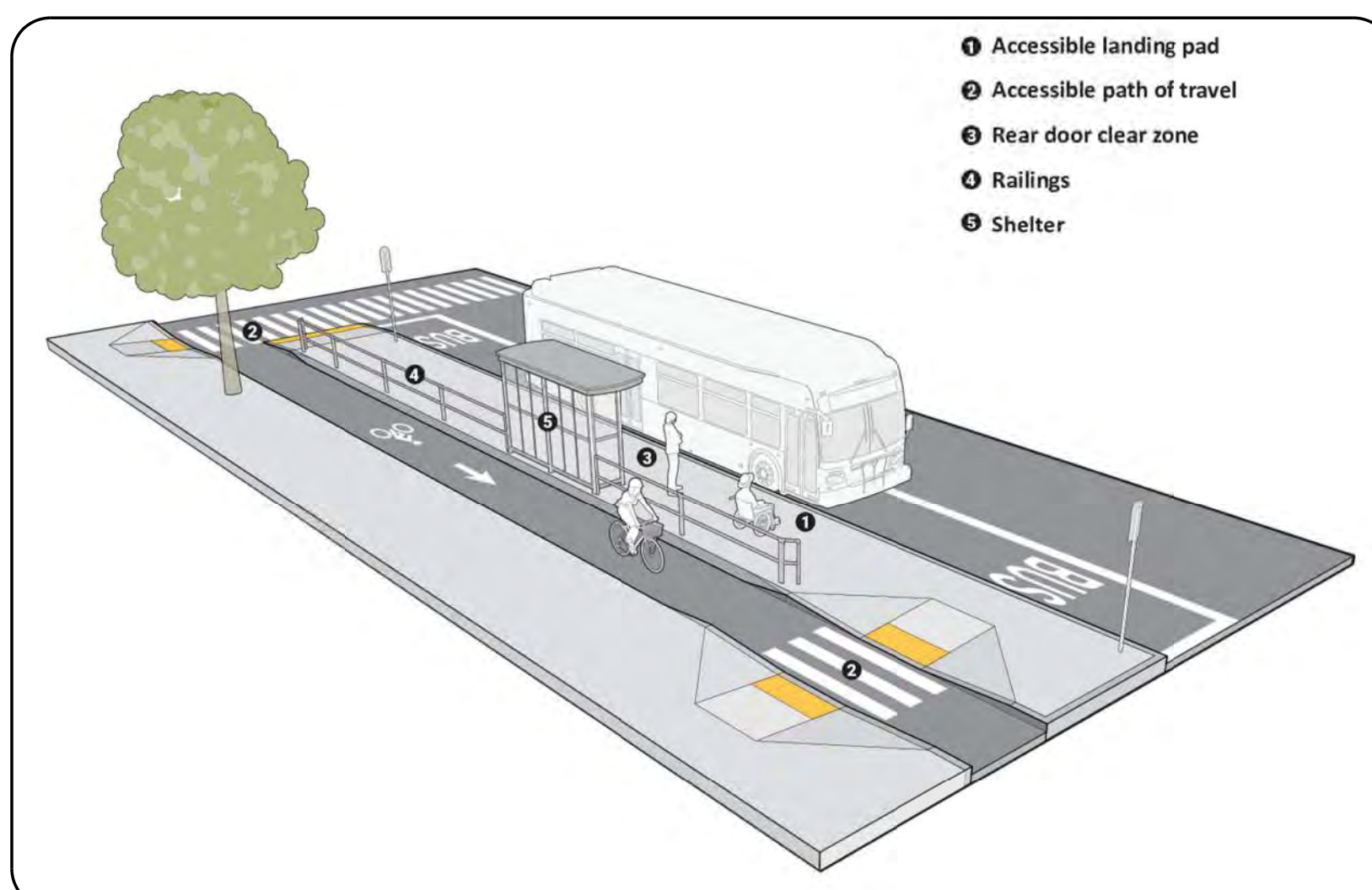
- Enhances aesthetics of corridor.

Historical Interpretation and Public Art



- Placed around corridor to enhance aesthetics and promote community involvement.

Bus Stops



- Bus stops to include shelters and streetscape features.
- Accessible route will be provided to bus loading area.
- Crosswalks will be provided for pedestrians crossing bicycle path.